



## ADULT RESPIRATORY EMERGENCIES

### **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

#### **FIELD ASSESSMENT/TREATMENT INDICATORS**

Chronic symptoms of pulmonary disease, wheezing, cough, pursed lip breathing, decreased breath sounds. Accessory muscle use, anxiety, ALOC or cyanosis.

#### **BLS INTERVENTIONS**

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated, obtain O<sub>2</sub> saturation on room air, or on home O<sub>2</sub> if possible.

#### **ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain O<sub>2</sub> saturation on room air or on home O<sub>2</sub> if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat times two (2).
3. For agencies utilizing Continuous Positive Airway Pressure (CPAP).
  - a. Obtain and document O<sub>2</sub> saturation levels every 5 minutes.
  - b. Apply and begin CPAP @ "0"cms. Instruct patient to inhale through nose and exhale through mouth.
  - c. Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against increasing pressure.
  - d. CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.
  - e. Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form.
4. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.

5. Base station physician may order additional medications or interventions as indicated by patient condition.

### **ACUTE ASTHMA/BRONCHOSPASM**

#### **FIELD ASSESSMENT/TREATMENT INDICATORS**

History of prior attacks, associated with wheezing, diminished breath sounds, or cough. A history of possible toxic inhalation, associated with wheezing, diminished breath sounds, or cough. Suspected allergic reaction associated with wheezing, diminished breath sounds or cough.

#### **BLS INTERVENTIONS**

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated, humidified oxygen preferred.

#### **ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, obtain O<sub>2</sub> saturation on room air if possible.
2. Nebulized Albuterol 2.5mg, with Atrovent 0.5mg may repeat times two (2).
3. For signs of inadequate tissue perfusion, initiate IV bolus of 300cc NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus.
4. For agencies utilizing Continuous Positive Airway Pressure (CPAP).
  - a. Obtain and document O<sub>2</sub> saturation levels every 5 minutes.
  - b. Apply and begin CPAP @ “0”cms. Instruct patient to inhale through nose and exhale through mouth.
  - c. Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against increasing pressure.
  - d. CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.

- e. Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form
5. If no response to Albuterol, give Epinephrine 0.3mg (1:1,000) SC. Contact Base Station for patients with a history of coronary artery disease, history of hypertension or over 40 years of age prior to administration of Epinephrine.
6. May repeat Epinephrine 0.3mg (1:1,000) SQ after 15 minutes.
7. For suspected allergic reaction, consider Diphenhydramine 25mg IV, or 50mg IM.
8. For persistent severe anaphylactic shock, administer Epinephrine 0.1mg (1:10,000) IV slow push. May repeat as needed to total dosage of 0.5mg.
9. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.
10. Base station physician may order additional medications or interventions as indicated by patient condition.

### **ACUTE PULMONARY EDEMA/CHF**

#### **FIELD ASSESSMENT/TREATMENT INDICATORS**

History of cardiac disease, including CHF, and may present with rales, occasional wheezes, jugular venous distention and/or peripheral edema.

#### **BLS INTERVENTIONS**

1. Reduce anxiety, allow patient to assume position of comfort.
2. Administer oxygen as clinically indicated. For pulmonary edema with high altitude as a suspected etiology, descend to a lower altitude and administer high flow oxygen with a non re-breather mask.
3. Be prepared to support ventilations as clinically indicated.

#### **ALS INTERVENTIONS**

1. Maintain airway with appropriate adjuncts, Obtain O<sub>2</sub> saturation on room air if possible
2. Nitroglycerine 0.4mg sublingual/transmucosal with signs of adequate tissue perfusion. May be repeated as long as patient continues to have signs of adequate

- tissue perfusion. **If a Right Ventricular Infarction is suspected, the use of nitrates is contraindicated.**
3. For agencies utilizing Continuous Positive Airway Pressure (CPAP).
    - a. Obtain and document O<sub>2</sub> saturation levels every 5 minutes.
    - b. Apply and begin CPAP @ “0”cms. Instruct patient to inhale through nose and exhale through mouth.
    - c. Slowly titrate pressure in 3cm increments up to a maximum of 15cms according to patient tolerance while instructing patient to continue exhaling against the increasing pressure.
    - d. CPAP should be continued until patient is placed on CPAP device at receiving hospital ED.
    - e. Document CPAP level, O<sub>2</sub> saturation, vitals, patient response and adverse reactions on appropriate form.
  4. Consider advanced airway per protocol Reference #10050, Nasotracheal Intubation.
  5. Base station physician may order additional medications or interventions as indicated by patient condition.
  6. In radio communication failure (RCF), the following medications may be utilized.
    - a. Dopamine 400mg in 250cc NS titrated between 5 – 20mcg/min to maintain adequate tissue perfusion.
    - b. Furosemide 40mg-100mg IV or 2 times the daily dose to maximum of 100mg IV.
    - c. Nebulized Albuterol 2.5mg with Atrovent 0.5mg after patient condition has stabilized.